

## **IN THE CLAIMS**

Claim 1 has been amended as follows:

1. (Currently Amended) ~~In an~~ An X-ray tube having comprising:  
a metallic vacuum housing containing an evacuated volume;  
an anode disposed in said evacuated volume;  
~~and~~ a cathode disposed in said evacuated volume, said cathode emitting  
~~which emits~~ an electron beam proceeding from said cathode to said  
anode, ~~the improvement comprising a surface of; and~~  
said metallic vacuum housing having a surface facing, and defining a part of,  
said evacuated volume, said surface having a plurality of notches  
therein that relieve thermal stress in said surface caused by electrons  
back-scattered onto said surface from said electron beam striking said  
anode.

Claim 2 has been cancelled.

2. (Cancelled)
3. (Original) The improvement of claim 1, wherein said notches are less than 0.5mm deep.
4. (Original) The improvement of claim 1, wherein said notches are less than 0.3mm deep.
5. (Original) The improvement of claim 1, wherein the distance between two notches of said notches is between 0.5mm and 1mm.
6. (Original) The improvement of claim 1, wherein said notches are lattice-shaped.

Claim 7 has been amended as follows:

7. (Currently Amended) The improvement of claim 1, wherein said notches are located where said back-scattered electrons, ~~of said electron beam, which are scattered when striking said anode,~~ most likely strike said ~~surface of said~~ metallic vacuum housing.

Claim 8 has been amended as follows:

8. (Currently Amended) The improvement of claim 1, wherein said metallic vacuum housing comprises a chamber containing said cathode, a volume containing said anode, and a shaft-shaped housing section, through which said electron beam proceeds from said cathode to said anode, connecting said chamber to said volume, said evacuated volume comprising an interior of said chamber, said volume containing said anode, and an interior of said shaft-shaped housing section.

9. (Original) The improvement of claim 8, wherein said notches are located around a region where said shaft-shaped housing section meets said volume.